

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

WSOU INVESTMENTS, LLC d/b/a	§	
BRAZOS LICENSING AND	§	
DEVELOPMENT,	§	
Plaintiff,	§	CIVIL ACTION No. 6:20-CV-534-ADA
	§	CIVIL ACTION No. 6:20-CV-536-ADA
v.	§	CIVIL ACTION No. 6:20-CV-538-ADA
	§	CIVIL ACTION No. 6:20-CV-542-ADA
HUAWEI TECHNOLOGIES CO. LTD.,	§	
<i>et al.</i> ,	§	
Defendants.	§	

**DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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Ex. 3	Appl. Ser. No. 11/377,578, 04/08/2009 Pre-appeal Brief
Ex. 4	Appl. Ser. No. 11/377,578, 07/17/2009 Appeal Brief
[REDACTED]	[REDACTED]
Ex. 6	Declaration of Tal Lavian Ph.D. regarding Claim Construction
Ex. 7	Appl. Ser. No. 11/377,578, 07/27/2010 Office Action response
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Ex. 9	ITU 984.1 (03/2008), “SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS, Digital sections and digital line system – Optical line systems for local and access networks, Gigabit-capable passive optical networks (GPON): General characteristics”
Ex. 10	<i>Huawei Technologies Co., Ltd. v. WSOU Investments LLC d/b/a Brazos Licensing and Development</i> , IPR2021-00228, Pet. For Inter Partes Review (PTAB filed Nov. 30, 2020)
[REDACTED]	[REDACTED]
Ex. 12	<i>Finjan, Inc. v. Juniper Networks, Inc.</i> , No. C 17-05659, Dkt. 491, at 10 (N.D. Cal. May 8, 2019)

Pursuant to the deadline set forth in the Scheduling Order (Dkt. 34), and the guidelines regarding claim construction set forth in the Order Governing Proceedings in Patent Cases (“OGP”) (Version 3.2), Defendants Huawei Technologies Co., Ltd., *et al.*, (collectively, “Huawei”) respectfully submit this Responsive Claim Construction Brief to Plaintiff’s (“WSOU’s”) Opening Claim Construction Brief (“Opening Brief”) (*See, e.g.*, -00542, Dkt. 43).<sup>1</sup>

## I. U.S. Patent No. 7,872,973 (“the ’973 Patent”) (Case No. 6:20-cv-00538)

### A. “a message to the upstream device to reduce a rate at which packets are sent to the queuing device to prevent the queue from filling” (claims 1, 9)

Huawei’s Proposed Construction	WSOU’s Proposed Construction
“a message instructing the upstream device to reduce a rate at which packets are sent to the queuing device to prevent the queue from filling” <sup>2</sup>	Plain and ordinary meaning

Claims 1 of the ’973 Patent requires, in relevant part:

Claim 1 requires:

... sending **a message** to the upstream device to reduce a rate at which packets are sent to the queuing device to prevent the queue from filling [“(Message 1)"] . . . ;  
 sending **a message** reporting the depth of the queue to the upstream device to thereby enable the upstream device to determine whether to reduce or increase the rate at which the upstream device sends packets to the queuing device [“(Message 2)"]; and  
 sending **the message** from the upstream device to an upstream network device to thereby control a rate at which the upstream device receives packets from the upstream network device.

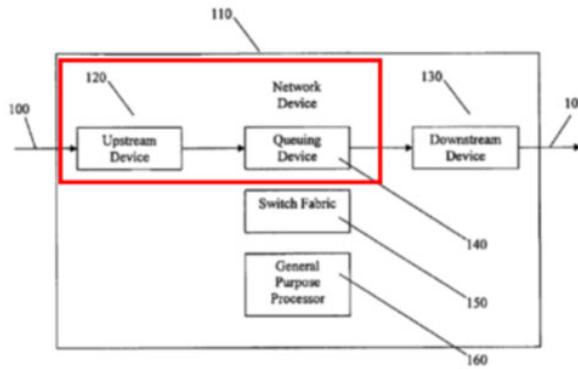
<sup>1</sup> This Brief addresses the disputed claim terms (that the parties were collectively permitted to present to the Court for resolution pursuant to the OGP (Version 3.2)) for Case Nos. 6:20-cv-00534, -00536, -00538, and -00542. Given the restrictions in OGP (Version 3.2), the parties are not presenting any disputed claim terms for Case No. 6:20-cv-00534 (U.S. Pat. No. 7,095,713) and Case No. 6:20-cv-00536 (U.S. Pat. No. 7,515,546).

<sup>2</sup> Huawei’s proposed construction has been slightly modified to replace “controlling” with “instructing” in order to more closely reflect the intrinsic evidence as discussed below.

'973 Patent, claim 1<sup>3</sup> (annotated). As shown above, the plain claim language creates unresolvable ambiguity as to whether the first “a message” appearing in the current disputed term in element [1b] (“Message 1”) or the second “a message” appearing in the following element [1c] (“Message 2”) is “the message” in the last claim element [1d]. *See* Section I.B. In order to address this issue, it is necessary to first construe the current disputed term to clarify its scope and relationship with the following elements.

**i. Huawei’s Proposed Construction Accords with the Specification and Prosecution History**

According to the claim language reproduced above, packets are sent from an upstream device to a queuing device, which corresponds to the scenario shown in Fig. 1, reproduced below.



'973 Patent, Fig. 1 (annotated). With reference to this configuration, the specification provides that an upstream device may adjust a rate of packets to prevent packet loss in two ways: (1) “passively” enforce a command to reduce a rate of the packets, and/or (2) “actively” control a rate of the packets by determining whether to reduce or increase the rate based on the received depth of the queue in a queuing device. *See e.g., id.*, 5:55-60, 6:3-8, 7:7-9 and 17-21. As to (1), the specification states that the upstream device 120 may be instructed to slow down or stop sending

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<sup>3</sup> Claim 9 contains similar claim limitations and so only the claim language from claim 1 is addressed here. The same arguments would equally apply to claim 9.

traffic destined to the queuing device 140 when the queue(s) in the queuing device 140 are congested<sup>4</sup>. *See id.*, 5:55-60 (“Instead of allowing the queuing device 140 to fill its queues and discard traffic packets, the queue depth monitoring system alerts an upstream device (e.g., 120 in FIG. 1) to slow down or stop sending traffic destined to the congested queue or queues in the queuing device 140”). Therefore, Huawei’s proposed construction for the current term (Message 1) is fully supported by the above-identified disclosure with respect to the instructing message/command.

The prosecution history of the ’973 Patent further demonstrates the necessity of including “instructing” in the construction of the disputed term above because it differentiates Message 1 from Message 2. Specifically, during prosecution, in order to overcome the Gupta prior art reference that taught “a message instructing the ingress queue to slow down the rate at which packets are dequeued,” disclosing Message 1, the patent applicants amended the claims to add the claim limitation of Message 2 (allowing active control by an upstream device). *See Ex. 1, “Appl. Ser. No. 11/377,578, 01/06/2009 non-final Office Action,” at 3 and Ex. 2, “Appl. Ser. No. 11/377,578, 03/03/2009 Office Action response,” at 2, 4.* To secure allowance of the ’973 Patent, in a Pre-appeal Brief, the patent applicants argued:

In other words, the system of Gupta sends a message instructing the ingress queue to slow down the rate at which packets are dequeued, rather than sending a message reporting the depth of the egress queue and letting the ingress queue determine the appropriate action (i.e., whether to increase to decrease the rate of packets dequeued). Thus, the system of Gupta, by only sending threshold crossing events rather than actual queue depths, lacks the error recovery functionality described above.

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<sup>4</sup> With respect to “passively” enforcing a command, the specification also provides that another message may be sent to the upstream device 120 to increase the rate of packets when the queue(s) in the queueing device 140 are drained. *See ’973 Patent, claim 2 and 5:60-62.*

Ex. 3, “Appl. Ser. No. 11/377,578, 04/08/2009 Pre-appeal Brief,” at 3 (emphasis added). In the Appeal Brief, the patent applicants further argued:

Moreover, Applicant respectfully submits that Gupta fails to enable an upstream device to determine whether to reduce or increase the packet sending rate. Instead, the congestion messages [124] function as direct commands to the ingress queue manager [108]. Gupta completely lacks any concept of determining the rate in an upstream device because Gupta’s egress queue manager [106] dictates the subsequent actions of the ingress queue manager [108]. In addition, Gupta only describes rate reduction, never describing an option to increase a packet rate.

Ex. 4, “Appl. Ser. No. 11/377,578, 07/17/2009 Appeal Brief,” at 11 (emphasis added).

Tellingly, the patent applicants argued that Message 2 is different from Gupta’s direct command that dictates/instructs an ingress queue (the claimed upstream device) to slow down a rate of packets, which is Message 1. As such, the patent applicants’ argument evidences that (1) Message 1, like Gupta’s direct command, is a message to directly instruct/command an upstream device to reduce a rate of packets, and thus the upstream device passively enforces this message, and that (2) Message 1, unlike Message 2, is not a message to enable an upstream device itself to actively control a rate of packets.

**ii. A Construction of “Plain and Ordinary Meaning” is Inadequate for the Current Term Because It Cannot Resolve the Parties’ Dispute**

The plain and ordinary meaning is inadequate because it cannot “resolve the parties’ dispute” as the current term has “more than one ordinary meaning.” *O2 Micro International Ltd. v. Beyond Innovation Technology Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Therefore, the plain and ordinary meaning, asserted by WSOU, cannot resolve parties' dispute at least as to whether the scope of the current term includes *any* message that will eventually "reduce a rate at which packets are sent to the queuing device," regardless of directly or indirectly.

**a. The Plain and Ordinary Meaning Will Blur the Boundary between the Current term (Message 1) and Message 2**

The parties' dispute as stated above creates another problem – the scope of WSOU's "plain and ordinary meaning" of the current term (Message 1) is too broad to include the scope of Message 2 because Message 2 may also result in "reduc[ing] a rate at which packets are sent to the queuing device." However, that is impermissible in view of the prosecution history and specification as discussed above, and indeed the claim language itself. For example, claim 1 does not recite "*the* message reporting the depth of the queue to the upstream device, it recites "*a* message reporting the depth . . ." Therefore, the claim language requires that Message 1 in element [1b] and Message 2 in element [1c] be two different messages. Moreover, WSOU appears to agree with such an interpretation. *See, e.g.*, Opening Brief, at 5-7 (where WSOU specifically argues that "the message" in the last claim limitation must be Message 1, and cannot be Message 2.)

**b. The Plain and Ordinary Meaning Cannot Reconcile WSOU's Infringement and Validity Positions**

WSOU's interpretation of this claim for its infringement theories as discussed above contradicts WSOU's arguments against indefiniteness. Specifically, in order to claim "the message" only refers to Message 1 to avoid indefiniteness, WSOU specifically argues that

Message 1 (like “the message” in claim element [1d]) is to “reduce or control a rate,” and that Message 2 does ***not*** work because it only indirectly controls a rate by providing a message reporting the ***depth of the queue*** to “enable[]” the ‘upstream device to determine whether to reduce or increase the rate.’” See Opening Brief, at 5, 7 (emphasis added). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Thus, WSOU attempts to use the “plain and ordinary meaning” here to conveniently manipulate the scope of the current term in a contradictory fashion to satisfy both its infringement and validity allegations. See *01 Communique Laboratory, Inc. v. Citrix Systems, Inc.* 889 F.3d 735, 743 (Fed. Cir. 2018) (“A patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement.” (citations omitted)).

Based on the above, the Court should adopt Huawei’s proposed construction for this term.

#### B. “the message” (claims 1, 9)

Huawei’s Proposed Construction	WSOU’s Proposed Construction
Indefinite	Plain and ordinary meaning

Continuing the discussion of Messages 1 and 2 above, the parties’ dispute here centers on which message, namely Message 1 in element [1b] or Message 2 in element [1c], is “the message” in element [1d]. WSOU asserted that under the plain and ordinary meaning, “the message” refers to Message 1. However, WSOU’s four-page long argument as to why “the message” has to refer to Message 1, not Message 2, only serves to demonstrate the unresolvable ambiguity of the relationship between and among Message 1, Message 2, and “the message.” See Opening Brief, at 4-7.

i. “The Message” is Indefinite Because It is Unclear Whether “the Message” Refers to Message 1 or Message 2

One of the cornerstones of the definiteness requirement is “to afford clear notice of what is being claimed so as to apprise the public of what is still open to them.” *HZNP Medicines LLC, et al., v. Actavis Laboratories UT, Inc.*, 940 F.3d 680, 694 (Fed. Cir. 2019). The meaning of “the message” cannot be determined based on the claim language, specification, or prosecution history, and so fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention. *See* Ex. 6, Lavian Declaration, at ¶¶ 133-147.

For example, as compared below, the indefiniteness of “the message” is extremely similar to that of “the indication” in *Adaptix, Inc. v. AT&T Mobility LLC*, where claim 2 of the patent in question was found invalid because it “does not specify whether the indication to be sent by the subscriber unit is that of element [d] or [e] in claim 1.” *See Adaptix, Inc.*, 2014 WL 12622422, at \*7-8 (E.D. Tex. March 24, 2014).<sup>5</sup>

Claim Language in <i>Adaptix, Inc.</i>	Claim Language in Claim 1 <sup>6</sup>
<p>1. A method for subcarrier selection for a system employing orthogonal frequency division multiple access (OFDMA) comprising:</p> <p>...</p> <p>[d] the subscriber unit receiving <i>an indication</i> of subcarriers of the set of subcarriers selected by the base station for use by the subscriber unit; and</p>	<p>1. A method for incorporating a queuing device as a lossless processing stage in a network device in a communications network between an upstream device and a downstream device in the network device, comprising:</p> <p>...</p> <p>[1b] . . . sending <i>a message</i> to the upstream device to reduce a rate at which packets are sent to the queuing device to prevent the queue from filling, thereby preventing packet discarding and loss by the queuing device [“(Message 1)”];</p>

<sup>5</sup> This Report and Recommendation of the United States Magistrate Judge was later affirmed by an Order of granting Defendants’ Motion for Summary Judgement on claims 2-4 based on indefiniteness. *See Adaptix, Inc. v. AT&T Mobility LLC*, 2014 WL 12622302, at \*2 (E.D. Tex. May 29, 2014).

<sup>6</sup> Claim 9 requires similar claim limitations and so only claim language in claim 1 is addressed here. The same arguments for claim 1 above would equally apply to claim 9.

<p>[e] the subscriber submitting updated feedback information, after being allocated the set of subcarriers to be allocated an updated set of subcarriers, and thereafter the subscriber unit receiving <b><i>another indication</i></b> of the updated set of subcarriers.</p> <p>2. The method defined in claim 1 further comprising the subscriber unit sending <b><i>the indication</i></b> to the base station.</p>	<p>[1c] sending <b><i>a message</i></b> reporting the depth of the queue to the upstream device to thereby enable the upstream device to determine whether to reduce or increase the rate at which the upstream device sends packets to the queuing device [("Message 2")]; and</p> <p>[1d] sending <b><i>the message</i></b> from the upstream device to an upstream network device to thereby control a rate at which the upstream device receives packets from the upstream network device.</p>
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Like in *Adaptix*, the specification and prosecution history of the '973 Patent also fail to shed light on which of the two messages in elements [1b] and [1c] is "the message" in element [1d]. For example, the patent applicants amended the claims to add element [1d] based on the disclosure at 6:26-32 during prosecution. *See* Ex. 7, "Appl. Ser. No. 11/377,578, 07/27/2010 Office Action response," at 4, 6, 17. The specification of the '973 Patent at 6:26-32 recites:

According to one embodiment, the upstream device 120 may ***forward or relay a message from the queuing device 140 (i.e., with respect to controlling the rate at which packets are sent to the queuing device 140)*** to an upstream network device (not shown but similar to network device 110) in the network 100 ***to thereby control the rate*** that which the upstream device 120 receives packets from the upstream network device.

(emphasis added). However, both Message 1 and Message 2 act "with respect to controlling the rate," because they both can affect a rate of packets (e.g. by Message 1 directly instructing an upstream device to reduce a rate of packets or by Message 2 enabling an upstream device to actively control a rate of packets ). *See* Section I.A.i. In fact, the above-identified disclosure mostly mirrors the claim language in element [1d]. This disclosure then further confirms that "the message" in element [1d] is "forward[ed] or relay[ed]" to an upstream network device, and so it is

not a whole new message created by an upstream device. *See* '973 Patent, 6:27-29. Accordingly, like “the indication” in *Adaptix* above, “the message” is indefinite.

Likewise, the indefiniteness of “the message” is similar to that of “the material” in *Sensor Electronic Technology, Inc. v. Bolb, Inc.*, where claim 26 of the patent reciting “the material” was found invalid because claim 11, which claim 26 depends from, “mentions ‘a material’ twice, first in reference to ‘a first layer composed of a material,’ and second in reference to ‘a second layer composed of a material.’” *Sensor Electronic Technology, Inc. v. Bolb, Inc.*, 2019 WL 4645338, at \*31-32 (N.D. Cal. Sep. 24, 2019). Accordingly, the court in *Sensor* concluded that “it is ambiguous whether the claim term ‘the material’ refers to ‘a first layer composed of a material,’ or ‘a second layer composed of a material,’ or both.” *Id.*; *see also Implicit L.L.C. v. F5 Networks, Inc.*, 2015 WL 2194627, at \*11 (N.D. Cal. May 6, 2015) (“the term ‘the packet of the message’ in dependent Claim 9 appears to be indefinite as lacking proper antecedent basis, because Claim 1 recites both ‘a received packet’ and ‘subsequent packets,’ making it unclear which ‘packet’ Claim 9 references”). The same as in *Adaptix*, the specification in *Sensor Electronic Technology* cannot solve the puzzle. *See Sensor Electronic Technology, Inc.*, 2019 WL 4645338, at \*32.

**ii. The Intrinsic Evidence Does Not Support WSOU’s Assertion That “The Message” Only Refers to Message 1**

WSOU contends that “the message” refers to Message 1 because “only elements 1b and 1d specify that the sending of the message is to either reduce or control a rate,” and “in element 1c, the act of sending of the message itself does not affect rate.” Opening Brief, at 5, 7. However, all the intrinsic evidence suggests otherwise. First, element [1d] requires “sending the message from the upstream device to an upstream network device to *thereby control a rate* at which the upstream device receives packets from the upstream network device.” Element [1d] itself does not specify a way of controlling the rate. The phrase “to thereby control a rate” only expresses an effect

resulted from the operation of an upstream network device after it receives “the message” from an upstream device. Second, the claim language and specification explicitly recite that Message 2 can enable an upstream device to determine whether to reduce or increase the rate, and, therefore, Message 2 is also acts respect to controlling a rate of packets. ’973 Patent, claims 1, 9 and 7:17-21. In fact, compared to Message 1, which only instructs an upstream device to reduce a rate of packets, Message 2 enables the upstream device to “fully control” a rate of packets by either reducing or increasing the rate. Third, during prosecution, the patent applicants amended the claims to add element [1c] and Message 2 and explicitly argued that “[b]y periodically reporting queue depths rather than only reporting threshold crossing events, the system will let the *source determine an appropriate transmit rate . . .*” Ex. 2, “Appl. Ser. No. 11/377,578, 03/03/2009 Office Action response,” at 2, 4, 13 (emphasis added). Therefore, Message 1 is not the only message that relates to controlling a rate of packets.

As to WSOU’s contention that “the act of sending of [sic] the message itself [in element [1c] with respect to Message 2] does not affect rate,” (Opening Brief, at 7), that claim is incorrect for several reasons. First, to be precise, the rate is actually affected by the operation of an upstream device after receiving Message 1 and/or Message 2, instead of “the act of sending [] the message itself,” as claimed by WSOU. Second, as stated above, the intrinsic evidence shows that Message 2 also involves rate control.

[REDACTED]

[REDACTED]

[REDACTED]

As such, WSOU’s contention that only Message 1 is “the message” is incorrect. As shown above, the meaning of “the message” cannot be determined based on the claim language,

specification, or prosecution history of the '973 Patent, and therefore claims 1 and 9 are indefinite and therefore invalid.

- C. “**a module for, if the depth of the queue passes a predetermined threshold, sending a message to the upstream device to reduce a rate at which packets are sent to the queuing device to prevent the queue from filling, thereby preventing packet discarding and loss by the queuing device” (“Module 1”)** (claim 9)
- D. “**a module for sending a message reporting the depth of the queue to the upstream device to thereby enable the upstream device to determine whether to reduce or increase the rate at which the upstream device sends packets to the queuing device” (“Module 2”)** (claim 9)
- E. “**a module for sending the message from the e stream device to an upstream network device to thereby control a rate at which the upstream device receives packets from the upstream network device” (“Module 3”)** (claim 9)

Huawei’s Proposed Construction	WSOU’s Proposed Construction
Subject to 35 U.S.C. § 112, ¶6  Indefinite for failure to disclose sufficient corresponding structure.	Plain and ordinary meaning

The parties dispute whether the limitations above are drafted in a manner that invokes 35 U.S.C. §112, ¶ 6, and if so, whether there is adequate corresponding structure that is clearly linked to and can accomplish the claimed function.<sup>7</sup>

- i. **The Current Terms Should be Construed under 35 U.S.C. §112, ¶ 6, Because They Fail to Recite Sufficient Structure For Performing the Function in the Claim Language**

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<sup>7</sup> WSOU alleges that Huawei failed to provide arguments in the Preliminary Invalidity Contentions to rebut a presumption against applying 35 U.S.C. §112, ¶ 6 due to the lack of the word “means.” *See* Opening Brief, at 8. However, Huawei’s Preliminary Invalidity Contentions do not require such a showing. *See Ultravision Techs., LLC v. Lamar Advert. Co.*, 2017 WL 3836139, at \*1 (E.D. Tex. Apr. 18, 2017) (holding that contentions only need to provide “adequate notice and information with which each party can litigate their cases”).

In *Williamson v. Citrix Online, LLC*, the Federal Circuit determined to abandon a strong presumption that a limitation lacking the word “means” is not subject to § 112, ¶ 6, and clarified that the presumption can be overcome “if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (*en banc*) (citation omitted). In *Williamson*, the claim in dispute recited:

a presenter computer system . . .

an audience member computer system . . .

a distributed learnings server . . . comprising: . . . a *distributed learning control module* for receiving communications transmitted between the presenter and the audience member computer systems and for relaying the communications to an intended receiving computer system and for coordinating the operation of the streaming data module . . . .

(emphasis added). The Federal Circuit held that the claim did not describe “how the distributed learning control module interacts with other components in the distributed learnings server in a way” that may inform the structure of the module. *Id.* at 1351. The same as the “distributed learning control module” in *Williamson*, claim 9 also fails to describe how the current modules interact with each other or with other modules that are executed by the same processor. As such, the current module limitations should also invoke 35 U.S.C. §112, ¶ 6.

WSOU argues that the claim language recites a specific structure that can perform the functions as claimed, including various devices in the preamble, and a processor. *See* Opening Brief, at 8-10. However, in *Williamson*, the Federal Circuit recognized that the claim “do[es] not describe certain inputs and outputs at a very high level (e.g., communications between the presenter and audience member computer systems),” but determined that those descriptions do not inform structure for the distributed learning control module. *Williamson*, 792 F.3d at 1351. Similarly, while claim 9 provides high-level descriptions about various devices and a processor in

a network device, it still fails to inform any structural character between the current modules and those devices. *See Ex. 6, Lavian Declaration, at ¶¶ 148-150, 152.* For example, claim 9 fails to inform whether the current modules are located within any of the devices as recited by the preamble, or external to all of them. *See id., at ¶151.*

WSOU cites *Zeroclick, LLC v. Apple Inc.*, where the Federal Circuit determined that “program” and “user interface code” are not *per se* nonce words. *See Opening Brief, at 8-9,* citing *Zeroclick, LLC*, 891 F.3d 1003, 1007-09 (Fed. Cir. 2018). However, *Zeroclick* is distinguishable. In *Zeroclick*, the “program” had an existing/conventional graphical user interface program as its antecedent reference, and “user interface code” was “meant to be updated using two configuration changes recited in the claim—to the code stored in a memory connected to the processor.” *Zeroclick, LLC*, 891 F.3d at 1008. Importantly, *Zeroclick*’s context does not exist in claim 9. In contrast, in claim 9, the “module” in the current module terms is merely a nonce word and does not connote any structure to a person of ordinary skill in the art. *See Ex. 6, Lavian Declaration, at ¶ 150; see also Williamson*, 792 F.3d at 1350 (“the word ‘module’ does not provide any indication of structure because it sets forth the same black box recitation of structure for providing the same specified function as if the term ‘means’ had been used”); *Rain Computing, Inc. v. Samsung Electronics America, Inc., et al.*, Case No. 20-1646, Dkt. No. 45 at 5 (Fed. Cir. Mar. 2, 2021) (“‘module’ here [in “user identification module”] does not provide any indication of structure.”)

Next, WSOU cites to Fig. 3 from the ’973 Patent and asserts that the current modules can be resident in the memory. *See Opening Brief, at 9-10.* However, claim 9 does not recite any memory. Therefore, WSOU cannot assert that claim 9 has recited sufficient structure based on memory that is only disclosed in the specification. *See Ex. 6, Lavian Declaration, at ¶ 154.*

Nevertheless, WSOU appears to argue that as long as the claim language recites a CPU and a memory, sufficient structure can be found. *See id.*, at 10 (citing *LG Electronics, Inc. v. Bizcom Electronics, Inc.*, 453 F.3d 1364, 1372 (Fed. Cir. 2006)). However, in *LG Electronics, Inc.*, the claim language explicitly recited “the control unit **comprises** a [central processing unit (‘CPU’)] and a partitioned memory system,” and thus the Federal Circuit found “the control unit” was not a means-plus-function term and should be construed as “a combination comprising a CPU and a partitioned memory system capable of controlling the communication unit.” *LG Electronics, Inc.*, 453 F.3d at 1372 (emphasis added). To the contrary, claim 9 does not recite that the current modules comprise any such structure. *See* Ex. 6, Lavian Declaration, at ¶ 153. Based on the foregoing, 35 U.S.C. 112, ¶ 6 should be invoked.

**ii. The Specification Fails to Disclose the Corresponding Structure for the Current Terms**

35 U.S.C. 112, ¶ 6 requires that the court determine “what structure, if any, disclosed in the specification corresponds to the claimed function.” *Williamson*, 792 F.3d at 1351. The “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). WSOU has failed to identify any corresponding structure in the specification for the module limitations in its Opening Brief.

Huawei anticipates that WSOU may argue that a memory (330) and/or a processor (320 or 160) of a data processing system (300) are the corresponding structure as WSOU relied on those disclosures to argue that sufficient structure exists in the claim language. *See* Opening brief, at 9-10 (citing ’973 Patent, 4:50-64 and Figs. 1-2). Yet WSOU’s arguments directly contradicts black-letter law relating to claim construction. *See EON Corp. IP Holdings LLC v. AT&T Mobility LLC*,

785 F.3d 616, 621 (Fed. Cir. 2015) (“this court has consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor”); *see also Rain Computing*, Case No. 20-1646, Dkt. No. 45 at 8 (holding that computer-readable media or storage device[s] are not sufficient structure for the “control access” function of “user identification module” because “these computer-readable media or storage devices amount to nothing more than a general-purpose computer”). Further, when the claim requires a computer-implemented function, the corresponding specification must disclose an algorithm that accomplishes the claimed function. *See Function Media, L.L.C. v. Google Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013); *see also Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1332-33 (Fed. Cir. 2008). WSOU has failed to identify any algorithms for performing functions as claimed. *See* Ex. 6, Lavian Declaration, at ¶¶ 156-157.

**a. The Specification Fails to Disclose any Algorithm for Module 1 or Module 2**

Notably, the specification fails to disclose any algorithm that accomplishes either the step of “if the depth of the queue passes a predetermined threshold, sending a message to the upstream device to reduce a rate at which packets are sent to the queuing device . . .,” or the step of “sending a message reporting the depth of the queue to the upstream device to thereby enable the upstream device . . .,” as claimed. WSOU may argue that the flow chart in Fig. 3 and corresponding descriptions at 7:1-21 disclose the algorithms. However, those disclosures are insufficient because they only mirror the functions as required by the claim language. *See Aristocrat Techs.*, 521 F.3d at 1334 (finding insufficient “language [that] simply describes the function to be performed, not the algorithm by which it is performed’); *see also* Ex. 6, Lavian Declaration, at ¶ 158.

Those disclosures fall far short of disclosing the required “step-by-step procedure” for sending a message to an upstream device to reduce a rate of packets to the queuing device thereby

preventing packet discarding and loss by the queuing device. *See Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012) (“an algorithm is still ‘a step-by-step procedure’ for accomplishing a given result”). For example, in order to prevent packet discarding and loss, certain coordination must occur among and between the upstream device (packet sender), the queuing device (packet receiver), and “certain structure” that sends a message to the upstream device. However, there is no disclosure of any algorithm in the specification for performing such coordination to accomplish a lossless status. *See* Ex. 6, Lavian Declaration, at ¶ 159.

Similarly, to enable the upstream device to determine whether to reduce or increase the rate, certain coordination is also needed among and between the upstream device (packet sender), the queuing device (packet receiver and a reporter of the depth of the queue within it), and “certain structure” that sends a message reporting the depth of the queue to the upstream device (and receives the information about the depth of the queue from the queuing device). Again, there is no disclosure of any algorithm in the specification for performing such coordination to accomplish enablement. *See* Ex. 6, Lavian Declaration, at ¶ 160.

#### **b. The Specification Fails to Disclose any Algorithm for Module 3**

The specification also fails to disclose any algorithm that accomplishes the claimed function of “sending the message from the e stream device to an upstream network device to thereby control a rate . . . .” *See* Ex. 6, Lavian Declaration, at ¶ 161. There is no flow chart or similar description that may possibly disclose algorithms that disclose how to perform the function as claimed. *See Function Media, L.L.C.*, 708 F.3d at 1318; *see also Aristocrat Techs.*, 521 F.3d at 1332-33. Col. 6, lines 26-32 might be the only paragraph from the specification that is at all relevant to this function. *See* ’973 Patent, 6:26-32 (“the upstream device 120 may forward or relay a message from the queuing device 140 . . . to an upstream network device”). Accordingly, since

the upstream device is a forwarder of the message, there must be certain coordination between the upstream device and “certain structure” that makes the upstream device forward the message to an upstream network device to thereby control a rate of packets. However, the specification is wholly silent in this regard, much less providing any corresponding algorithm. *See Ex. 6, Lavian Declaration, at ¶ 162.*

Moreover, the specification discloses that various packets may be sent, such as Internet Protocol (“IP”) packets, multiprotocol label switching (“MPLS”) packets, or asynchronous transfer mode (“ATM”) packets. *See ’973 Patent, 7:27-30.* However, there is no disclosure in regard to detailed protocols, formats, or encoding/decoding methods of the claimed message that are required to carry out a step-by-step procedure with respect to adjusting transmissions of various packets between a network device and an upstream network device. *See Ex. 6, Lavian Declaration, at ¶ 163.* Therefore, the specification fails to provide any clue as to how “certain structure” makes the upstream device able to forward such an intra-device message (within the network device) to an external upstream network device to thereby control a rate of packets. Because the specification of the ’973 Patent fails to disclose an algorithmic structure that is clearly linked to the claimed functions in the current module limitations, claim 9 is indefinite and therefore invalid. *See id.*

## **II. U.S. Patent No. 8,249,446 (“the ’446 Patent”) (Case No. 6:20-cv-00542)**

### **A. “[A method of / Apparatus for] regulating rogue behavior in an [optical network component comprising an optical transmitter / optical transmission device]” (claims 1, 15)**

Huawei’s Proposed Construction	WSOU’s Proposed Construction
“[A method of /Apparatus for] regulating rogue behavior by a subscriber-based [optical network component comprising an optical transmitter / optical transmission device]”	Plain and ordinary meaning

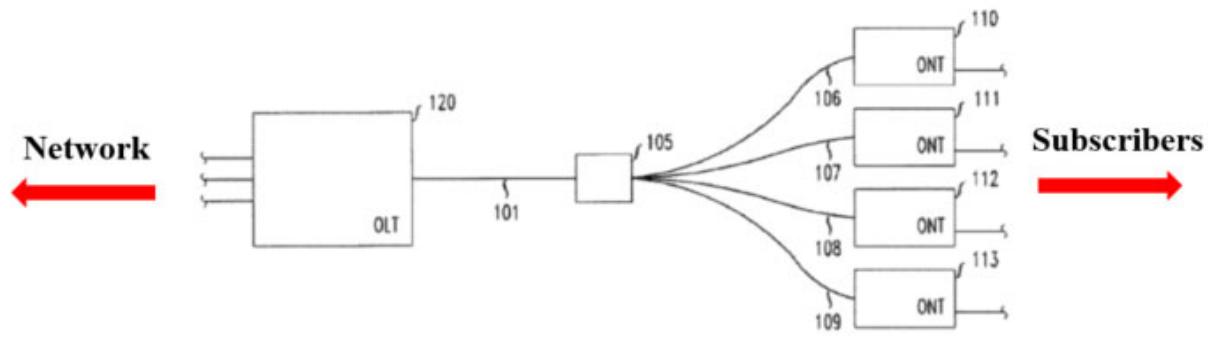
The language of the preambles of claims 1 and 15 creates doubt as to whether “regulating rogue behavior in” means “regulating rogue behavior by” or “regulating rogue behavior that occurred at.” In other words, it is unclear whether the preambles function to inform which entity the claimed method/apparatus should be implemented with and through. Huawei’s proposed construction answers this question and eliminates this doubt. For this reason alone, Huawei’s proposed construction should be adopted by the Court. However, the patent applicants for the ’446 Patent also disavowed the full scope of these claim terms by repeatedly characterizing these terms in the manner construed by Huawei both in the specification and during prosecution. As such, WSOU’s proposal of “plain and ordinary meaning” should be rejected, and Huawei’s proposed construction adopted.<sup>8</sup>

**i. Regulating a Rogue Behavior is Performed by a Subscriber-based Component/Device as Repeatedly Characterized by the Patent and Patent Applicants**

Giving the current terms their “plain and ordinary meaning” directly contradicts the intrinsic evidence, as doing so may cause the claims at issue to read on a non-subscriber-based component/device, which the specification disparages. For example, as shown below, Fig. 1 illustrates a relationship between subscriber-based devices (e.g., optical network termination (“ONT”) 110, 111, 112, 113) and a non-subscriber-based device (e.g., optical line termination (“OLT”) 120) in a passive optical network (“PON”) where a non-subscriber-based device that is usually located in the network provider’s switching office is connected by fiber optic cable (101) to a number of subscriber-based devices serving subscribers. *See* ’446 Patent, 1:53-59.

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<sup>8</sup> Importantly, WSOU does not challenge the fact that these preambles recite essential steps and/or are necessary to give life, meaning, and vitality to claims 1 and 15 of the ’446 Patents, and are thus should be considered limiting. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (“In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.”).



*Id.*, Fig. 1 (annotated).

In a PON (as shown above), each ONT is assigned time slots for upstream transmission, which are tightly scheduled by the OLT to maximize the available transmission time. *Id.*, 2:6-11. One problem encountered with an ONT is rogue behavior where one or more ONTs are “over-transmitting, and therefore transmitting, at least part of the time, at the wrong times,” resulting in disrupting communications for the entire PON. *Id.*, 2:18-24. To address this issue, the specification discloses the existing solution (ONT rogue detection and regulation by a non-subscriber-based device (e.g., OLT)), and explicitly stresses that the existing solution is undesirable because a rogue behavior occurring at a subscriber-based device (e.g., ONT) on the other end of PON may have compromised the transmissions between them. *See id.*, 2:32-39 (“First, the offending ONT must somehow be detected. The OLT will naturally be able to perceive in most cases that transmissions on the PON are not occurring normally.”) However, “since in this event a rogue ONT is likely transmitting at the wrong time, or disrupting the transmissions from the ONTs to the OLT, it may be difficult to identify the offending ONT.” As a result, “existing solutions that rely on communication between the OLT and one or more ONTs are often not satisfactory.”).

Therefore, the '446 Patent proposed the alleged invention that is “directed to a manner of regulating rogue behavior in optical transmission devices, preferably *by the optical transmission*

*device itself* or at least in a way that minimizes the need for communications with other network components.” *Id.*, 2:61-65 (Summary) (emphasis added); *see also id.*, 4:39-40 (“regulation of a rogue ONT mostly or exclusively *by the ONT itself* is desirable”) (emphasis added). Also, the specification explicitly states that “*an object of the present invention is to leave much of this function in the respective ONTs themselves.*” *Id.*, 4:60-61 (emphasis added). Thus, giving the disputed preambles their “plain and ordinary meaning” does not exclude a non-subscriber-based device (e.g., OLT), which the specification of the ’446 Patent clearly disfavors. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1321 (Fed. Cir. 2005) (*en banc*) (“the specification is ‘the single best guide to the meaning of a disputed term’”); *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1333 (Fed. Cir. 2009) (“Where the general summary or description of the invention describes a feature of the invention . . . and criticizes other products . . . that lack that same feature, this operates as a clear disavowal of these other products” (citation omitted)); *Techtronic Industries v. International Trade Commission*, 944 F.3d 901, 907 (Fed. Cir. 2019) (“patent disavows coverage of wall consoles lacking a passive infrared detector because the specification, in each of its sections, discloses as the invention a garage door opener improved by moving the passive infrared detector from the head unit to the wall console”).

Accordingly, the specification only teaches how to regulate a rogue behavior by a subscriber-based optical network component/device (e.g., ONT) as recited by claims 1 and 15, and does not offer any solution on how to improve an existing rogue regulation method performed by OLT. *See e.g.*, ’446 Patent, Figs. 2-3 and 5:9-7:61 (“An ONT for regulating rogue behavior will now be described in more detail. FIG. 2 is a simplified block diagram illustrating selected components of an ONT 200 according to an embodiment of the present invention . . . ,” and “Fig. 3 is a flow diagram illustrating a method 300 . . . this description will be presented largely in terms

of an ONT.”). In addition to Fig. 3, Fig. 4 further provides that an ONT can determine whether to disable its transmitter by additionally evaluating the network status based on OLT’s response to its network status query. *See id.*, Fig. 4 and 7:62-9:53 (“FIG. 4 is a flow diagram illustrating a method 400 of detecting rogue behavior in an optical transmitter according to an embodiment of the present invention. As with the embodiment of FIG. 3, this embodiment will be described in the context of an ONT operating in a PON.”).

Importantly, the specification concludes that “[i]n this manner, ***the present invention*** provides a way to regulate ONT behavior, and rogue behavior in particular, and ***do so autonomously***—though an attempt is made to communicate with the OLT and take advantage of any reply that is received.” *Id.*, 9:49-53 (emphasis added); *see also id.*, 7:59-61. Notably, the rogue regulation method as provided in Fig. 4 cannot be performed by an OLT, because if so, it is unnecessary to send any network status query (as OLT already knows the network status). Therefore, it is clear that the specification has defined “the present invention” to be a subscriber-based device (e.g., ONT) that self-regulates a rogue behavior, which can be done with or without knowing the network status from the OLT.

The claims themselves also show the necessity of construing the preambles as proposed by Huawei. *See Phillips*, 415 F.3d at 1314 (“The claims themselves provide substantial guidance as to the meaning of particular claim terms.”). For example, claim 4 recites “determining whether to disable the optical transmitter.” ’446 Patent, claim 4; *see also id.*, claims 5, 7-11 (“disable the optical transmitter”). Since the preamble of claim 1 recites “an optical network component comprising an optical transmitter,” the optical network component cannot be a non-subscriber-based device because only a subscriber-based device may have a rogue behavior and so its optical transmitter needs to be disabled as required by claims 4, 5, and 7-11. *See id.*

The prosecution history also confirms Huawei's proposed construction. During prosecution of the application that would eventually issue as the '446 Patent, the patent applicants claimed that the prior art did not recognize "utility in first determining the optical component meets the criteria for advance replacement, and then reversing that determination," and commented that "[i]ndeed, one of ordinary skill in such circumstances would likely simply replace the optical component since it has been identified as being ready for replacement." Ex. 8, "Appl. Ser. No. 12/649,606, 02/07/2012 Office Action response," at 9. Accordingly, the patent applicants have admitted that the "optical component" as claimed is a subscriber-based optical network component/device because it is the entity that would be replaced if being identified as being ready for replacement (e.g., due to a rogue behavior), or would not be replaced if the determination of replacement is reversed.

Moreover, as stated above, the specification only teaches how to self-regulate a rogue behavior by a subscriber-based optical network component/device as recited by claims 1 and 15. *See* '446 Patent, Figs. 2-4 and 5:9-8:53. Under the plain and ordinary meaning, claims 1 and 15 will likely be rendered invalid because they cover embodiments not enabled by the patent disclosure. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1378-80 (Fed. Cir. 2007) (holding that claims covering injectors with and without a pressure jacket were not enabled where the patent taught only injectors with a pressure jacket).

#### **ii. WSOU Mischaracterizes the Phrase "Subscriber-based"**

WSOU argues in its Opening Brief that "in the specification the phrase 'subscriber-based' is only used in the specification with reference to one type of optical component, an ONT" based on the paragraph shown below. Opening Brief, at 13. WSOU then challenged the alleged

unreasonableness of a hypothetical scenario in which the scope of the terms “optical network component” or “optical transmission device” are limited to ONTs. *See id.*, at 14.

The present invention will now be described in terms of detecting rogue behavior in an ONT operating within a PON. It should be recognized, however, that the present invention has applicability for use in other optical transmission devices and in other networks as well. Again, it is noted that herein the term “ONT” is meant to include all subscriber-based optical network components.

*See id.*, at 13-14 (citing '446 Patent, 4:28-34). WSOU misunderstands the meaning of this paragraph. The term ONT is used as a ***collective noun*** in the specification of the '446 Patent for all types of subscriber-based optical network components/transmission devices (e.g., ONT device itself or any device located at and serving a subscriber, such as ONU or MDU<sup>9</sup>). *See* '446 Patent, 4:48-50. Therefore, the excerpt above states “the present invention has applicability for use in other optical transmission devices [such as ONU or MDU].” *Id.*, 4:32-34.

WSOU’s mischaracterization is further evidenced by the description of “subscriber-based” devices in the specification. *See id.*, 1:63-2:5 (“***ONT*** is intended to refer broadly to all ***subscriber-based optical network components***. Different ONTs may, for example, be associated with a particular residence, while others may be associated with apartment buildings and small businesses, and permit access for a number of separate subscribers.”) (emphasis added); and 4:48-52 (“each of the ONTs are presumed to be ***located at and serving a different subscriber***, perhaps at their respective residences. The ONT at each location is connected or connectable to a device of the subscriber, or to a network of such devices”) (emphasis added). As such, the “subscriber-

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<sup>9</sup> ONU stands for optical network unit and MDU stands for multi-dwelling unit. They are also subscriber-based optical network devices located at and serving a subscriber. *See* Ex. 9, ITU 984.1 (03/2008), “SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS, Digital sections and digital line system – Optical line systems for local and access networks, Gigabit-capable passive optical networks (GPON): General characteristics,” at §§ 1, 5.1.1, and 5.2.

based [optical network component comprising an optical transmitter / optical transmission device],” as construed by Huawei, would include ONT devices themselves (not used as a collective noun), but are not limited to them.

**iii. Huawei’s Invalidity Arguments in the IPR Petition are Consistent with Huawei’s Proposed Construction Here**

WSOU further argues that Huawei did not construe this term in the parallel IPR proceedings involving the ’446 Patent (“IPR Proceedings”), and that Huawei’s IPR petition failed to mention any “subscriber” or “subscriber-based” construction. *See* Opening Brief, at 14-15. However, in Huawei’s IPR petition, Huawei asserted that the O’Byrne prior art reference discloses a rogue-behavior regulation by ONT, which according to the specification, is one of the subscriber-based optical network components/transmission devices. *See* Ex. 10, *Huawei Technologies Co., Ltd. v. WSOU Investments LLC d/b/a Brazos Licensing and Development*, IPR2021-00228, Pet. For *Inter Partes* Review (PTAB filed Nov. 30, 2020) (“IPR Petition”), at 17-18. Therefore, it is unnecessary to construe the current term in the IPR proceedings, and WSOU would not be prejudiced by any inconsistency as alleged. *See* Ex. 12, *Finjan, Inc. v. Juniper Networks, Inc.*, No. C 17-05659, Dkt. 491, at 10 (N.D. Cal. May 8, 2019) (holding that it is not fatal for the same expert to further construe a claim term in the district court case although the same term was not specifically proposed for construction in a parallel IPR proceeding); *see also Shire Development LLC, et al., v. Teva Pharmaceuticals USA, Inc., et al.*, 2019 WL 969638, at \*8 (D. DE. Feb. 28, 2019) (holding that the statements in IPR proceedings and prosecution history are unenlightening when they do not specifically discuss an issue in claim construction).

Based on the above, the Court should adopt Huawei’s proposed construction for this term.

**B. “output indicator” (claims 1, 15)**

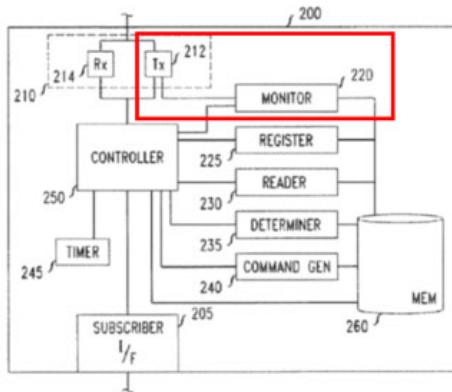
Huawei’s Proposed Construction	WSOU’s Proposed Construction
“indicator indicating an optical output being transmitted”	Plain and ordinary meaning

Huawei requests that the Court construe this term in order to resolve at the outset any dispute as to the scope of the asserted claims, as the meaning of this term is not commonly known to a person of ordinary skill in the art. Huawei’s proposed construction clarifies that the term “output” in the disputed term “output indicator” is an optical output being “transmitted” by an optical transmitter, instead of optical transmissions being received.

**i. Huawei’s Proposed Construction is Supported by the Specification**

Huawei’s proposed construction accords with the specification of the ’446 Patent. For example, Fig. 2 (annotated below) illustrates the configuration of ONT 200, which “includes a monitor 220 for monitoring one or more output indicators of the transmitter 212,” and Fig. 3 provides a flow chart of ONT operation, including “[o]nce the device is initialized, one or more transmitter output indicators are monitored (step 310).” ’446 Patent, Figs. 2 (as reproduced and annotated below) and 3, 5:27-29, and 6:27-28.

*FIG. 2*



Accordingly, the output indicator monitored by a monitor (220) indicates an optical output being transmitted by a transmitter (212) that is connected with the monitor. Moreover, the specification gives two exemplary output indicators: laser bias current (“LBC”) and monitor photodiode current (“MPC”). *See id.*, Abstract and 5:29-43. Neither of these can be used to indicate an optical output being received by a receiver, as both of them relate to the laser operation of a transmitter. Notably, the specification does not provide any disclosure regarding an output indicator that can indicate an optical output being received.

**ii. Construction is Necessary Because the Plain and Ordinary Meaning as Interpreted by WSOU is Incorrect**

Moreover, the alleged “plain and ordinary meaning” is inadequate because it cannot “resolve the parties’ dispute” as the current term has “more than one ordinary meaning.” *O2 Micro International Ltd.*, 521 F.3d at 1361 (Fed. Cir. 2008). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] However, this “ordinary” meaning is in conflict with the specification. For example, assuming that there has been at least one ONT having a rogue behavior in an optical network, a receiver (e.g. OLT) could not adequately monitor the optical output being received from the network and identify the offending ONT as the optical transmissions would have been compromised by at least one rogue ONT. *See* ’446 Patent, 2:31-39.

In addition, the specification does not provide any disclosure regarding an optical indicator indicating an optical output being received because the patent applicants repeatedly stress that the alleged invention of the ’446 Patent is a subscriber-based optical network component/transmission device that transmits optical outputs and performs a rogue-behavior regulation itself. *See* Section

II.A.i. As a result, claims 1 and 15 will likely be rendered invalid because they cover embodiments not enabled by the patent disclosure. *See Liebel-Flarsheim Co.*, 481 F.3d at 1378-80.

### **iii. Huawei’s Proposed Construction Would Not Exclude any Embodiment**

WSOU asserts that “the specification expressly states that not all output indicators need to be the output transmission itself” based on the specification disclosure at 5:44-47 (“Here it is noted that the other output indicator, if any, is something other than the burst enable signal itself . . .”). Opening Brief, at 15-16. WSOU thus claims that “Huawei’s proposed construction expressly excludes at least a preferred embodiment.” *Id.*, at 16. WSOU’s argument misses the mark, as Huawei’s proposed construction never equates “output indicators” to “output transmission itself.” Further, even the burst enable signal that is criticized by the specification is still an optical indicator that can indicate an optical output being transmitted because it is “for an optical laser or other light source.” ‘446 Patent, 2:40-42. Therefore, it cannot be inferred from WSOU’s citation that the “other output indicator” may include an output indicator indicating an optical output being received or any output indicator used by a receiver. As such, Huawei’s proposed construction would not exclude any embodiment provided in the specification.

### **iv. Huawei’s Invalidity Arguments in the IPR Petition are Consistent with Huawei’s Proposed Construction Here**

Lastly, WSOU once again complains that Huawei did not construe the current term in the IPR Proceedings. *See* Opening Brief, at 16. In particular, WSOU asserts that in the IPR Proceedings, Huawei advocated the current term means “amount of optical power, a period of time, or an amount of power past a threshold period of time, or other laser errors,” which is allegedly inconsistent with Huawei’s currently proposed construction. *Id.* (citing IPR Petition at 22). Not so. All of those exemplary optical indicators from the IPR are consistent with Huawei’s proposed construction here because they are output indicators that can be used to specifically

indicate the output power, time, or errors of an optical output being transmitted. Therefore, it is unnecessary to construe the current term in the IPR proceedings, and WSOU would not be prejudiced by any inconsistency as alleged. *See Ex. 12, Finjan, Inc., No. C 17-05659, Dkt. 491, at 10; see also Shire Development LLC, et al., 2019 WL 969638, at \*8.*

Based on the above, the Court should adopt Huawei's proposed construction for this term.

### C. “output [indicator] threshold (claims 1, 15)

Huawei's Proposed Construction	WSOU's Proposed Construction
“time length or a percentage of a total time window duration”	Plain and ordinary meaning

WSOU asserts that Huawei imported limitations from an exemplary disclosure in the specification into the claims by asserting that other embodiments of “output [indicator] threshold” exist. *See* Opening Brief, at 17 (citing '446 Patent, 6:60-64). To the contrary, the specification discusses the definition of an output (indicator) threshold three times as shown from the excerpts below, but all the discussions are directed to only *one* preferred embodiment in relation to “time length or a percentage of a total time window duration.”

In accordance with this embodiment of the present invention, ONT 200 also includes a monitor 220 for monitoring one or more output indicators of the transmitter 212. In this embodiment, the transmitter is presumed to include a laser, and an LBC is generated to assist in regulating its operation. ***Monitor 220 monitors the LBC, under the control of controller 250, for selected monitoring windows and, if the LBC indicates that the laser is ‘on’ for more than a predetermined percentage of the monitoring window duration,*** then controller 250 sets a suspect rogue flag in the register 225. . . Another output indicator that may be monitored is the MPC, with suspect rogue conditions flagged in register 225 in similar fashion. *Id.*, 5:27-40 (emphasis added).

In a preferred embodiment, the monitoring 310 is performed during ranging because then the amount of time that the light source is on is expected to be relatively small. Rogue behavior will be relatively easy to detect. Monitoring can also be performed at other times as well, however, as will be discussed in more detail below. ***In either case, the monitoring reveals, by tracking one or more of the output indicators, the time during the monitoring window that the light source***

*is on. This can be expressed, for example as a percentage of the total window duration.* *Id.*, 6:50-59 (emphasis added).

When the window closes, *this percentage is compared (step 315) to a set threshold value, for example 50%, to see if the threshold has been exceeded. Note that here, 50% is used as an example; in other embodiments, the threshold may be set to almost any value.* In some embodiments, this value may be changed remotely or automatically adjusted, or both. *Id.*, 6:60-65 (emphasis added).

In the context of the above-identified paragraphs, the phrase “the threshold may be set to almost any value” actually means that the threshold may be set to almost any time-related value with respect to a monitoring window, such as a different percentage other than 50% (e.g., 40%, 30%) of the window duration, or a time length expressed in another manner. Therefore, the “other embodiments” as asserted by WSOU do not exist. For example, the specification does not teach how to utilize other output thresholds, such as a laser power threshold, in monitoring an output indicator and setting or removing a suspect rogue flag accordingly. Whether a laser power threshold has been exceeded can only indicate whether an optical output is being transmitted, but cannot indicate whether such an optical output is being transmitted at the wrong times.

WSOU (once again) contends that Huawei’s interpretation of the current term in the IPR Proceedings is inconsistent with Huawei’s proposed construction. *See* Opening Brief, at 18. However, the IPR Petition asserted that the O’Byrne reference teaches an “output [indicator] threshold” as construed by Huawei by disclosing a time-related threshold. *See* IPR Petition, at 21-22, 28-29, 36. Therefore, it is unnecessary to construe the current term in the IPR proceedings, and WSOU would not be prejudiced by any inconsistency as alleged. *See* Ex. 12, *Finjan, Inc.*, No. C 17-05659, Dkt. 491, at 10; *see also Shire Development LLC, et al.*, 2019 WL 969638, at \*8.

Based on the above, the Court should adopt Huawei’s proposed construction for this term.

Dated: March 5, 2021

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system.

*/s/Jason W. Cook*  
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